PIT FURNACES
Controlled Atmosphere Retort Furnaces Type SG

In the case of heat treatment of heavy loads in retort furnaces with vertical loading, ROHDE pit furnaces type SG are the first choice.

Advantages of the ROHDE pit furnaces include extremely low energy and gas consumption, excellent temperature and atmosphere uniformity and optimized size and features depending on customers' requirements. If needed, load weights up to 200 tons and more are possible.

The smallest pit furnace of our product range has a usable space of 300mm diameter and 500mm height and the biggest furnace has a usable space of 5200 mm diameter and 5000 mm height. In between nearly everything is possible, within small grading. If your requirements cannot be satisfied with our standard programme we are of course able to design a furnace depending on your individual requirements.

All our furnaces include the following standard features: high efficient insulation materials, low charged heating elements therefore with a long lifetime in the case of electrically heated furnaces or state-of-the-art high efficient gas burner technology in the case of gas-heated furnaces and a control and operating system with everything you need.

Standard Equipment
- Safety and interlock technology for highest safety standards
- Fully automated heat treatment
- Control and registration of process gases
- Cover-opening by hydraulic or electric motors
- Compensator sealing versus open oil cup in case of furnaces with load support
- Evacuation of retort space possible in case of furnaces without load support
- Check valve and pressure retention valve
- Cooling device for controlled cooling of retort

Energy Efficiency
- Low energy consumption due to insulation materials with extreme low heat storage
- Low gas consumption due to optimized atmosphere control
- Low cooling water consumption due to cooling water control
- Individually designed heat recovery concepts

Additional Optional Accessories
- Gas fast-cooling with exterior heat exchanger
- Vacuum pumps to obtain quickly an oxygen-free atmosphere
- Sensors for advanced controlled supervision of circulating fan motors and fans
- Integration in existing production lines
- Barcode-scanner for charge recognition and automatic selection of the treatment programs
- Heating with gas burners
- Sensors for gas analysis
- Equipment corresponding to AMS 2750D
- Quenching baths, washing equipment and suitable air- and nitrogen tempering furnaces
- Online process- and operation control

In addition to processes such as bright annealing, magnetic soft iron annealing and nitriding our retort pit furnaces offer particular advantages for gas carburizing processes. Due to the construction with load support very high loads are possible. Together with our compensator system without open oil cup to seal the retort, which was designed and incorporated in the year 1997, the operation of load support furnaces now can be carried out in a clean and environmental safe condition and with highest regards to overall operator and equipment safety.

Besides heat treatment shops our clientele represents nearly all industries from automotive to pharmaceutical products.
CHAMBER FURNACES
Controlled Atmosphere Retort Furnaces Type KG

In the case of heat treatment in retort furnaces with horizontal loading, ROHDE chamber furnaces type KG are the first choice.

Advantages of the ROHDE chamber furnaces are extremely low energy and gas consumption, excellent temperature and atmosphere uniformity and optimized size and features depending on customers’ requirements.

The smallest chamber furnace of our product range has a usable space of 20x20x40 cm (width x height x depth). Starting with this size we have several available sizes from our standard programme. If your requirements cannot be satisfied with our standard programme we are of course able to design a furnace depending on your individual requirements.

All our furnaces include the following standard features: high efficient insulation materials, low charged heating elements therefore with a long lifetime in the case of electrically heated furnaces or state-of-the-art high efficient gas burner technology in the case of gas-heated furnaces and a control and operating system with everything you need.

Additional Optional Accessories
- Online process- and operation control
- Gas fast-cooling with exterior heat exchanger
- Vacuum pumps to obtain quickly an oxygen-free atmosphere
- Sensors for advanced controlled supervision of circulating fan motors and fans
- Integration in existing production lines
- Barcode-scanner for charge recognition and automatic selection of treatment programs
- Heating with gas burners
- Sensors for gas analysis
- Equipment corresponding to AMS 2750D

Our furnaces can be operated for various processes from annealing under nitrogen and other protective gases up to complex gas-nitriding processes. Our clientele represents nearly every industry from automotive to pharmaceutical products.